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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/917,763 07/31/2001 Mark Hornick 19111.0024 2795

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EXAMINER

FLEURANTIN, JEAN B

ART UNIT

PAPER NUMBER

2172

DATE MAILED: 06/03/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

8

Office Action Summary

Application No.

09/917,763

Applicant(s)

HORNICK, MARK

Examiner

Jean B Fleurantin

Art Unit

2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on RCE 04 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-31,33-61,63-91 and 93-120 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3-12 31,33-42,61,63-72,91,93-102 is/are allowed.
- 6) ☒ Claim(s) 13-30,43-60,73-90 and 103-120 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 2172

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed 4 May 2004 has been entered. Claims 28-39 are added. Claims 1, 3-31, 33-61, 63-91 and 93-120 remain pending for examination.

Response to Applicant' Remarks

2. Applicant's arguments, see Paper No 7, filed 4 May 2004, with respect to the rejection(s) of claim(s) 1, 3-31, 33-61, 63-91 and 93-120 under 35 U.S. C. 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of U.S. Patent No. 6,460,037 issued to Weiss and U.S. Patent No. 6,460,037 issued to Weiss et al.

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 23-30, 53-60, 83-90 and 113-120 rejected under 35 U.S.C. 102(e) as being unpatentable by U.S. Patent No. 6,460,037 issued to Weiss et al. (hereinafter “Weiss”).

As per claims 23, 53, 83 and 113, Weiss discloses, “In a data mining agent executing in a computer system” (see col. 3, lines 3-4), a method of data mining comprising the steps of:

“determining that the processing load in the computer system is high relative to at least one other computer system” as functional agents that execute the workflows required for the storage, selection, cleaning and an updating of data (see col. 3, lines 30-31), “the processing load

Art Unit: 2172

based on a processor utilization of the computer system due to tasks being executed by the computer system”, (see col. 3, lines 16-17);

“determining a remaining cost of completing processing of a data mining processing task being processed by the computer system” as priority would equate to which data mining are more important than others, (see col. 4, lines 30-31);

“determining whether the at least one other computer system can complete processing of the data mining processing task being at a lower cost than the computer system”, (see col. 6, lines 44-54); and

“if the at least one other computer system can complete the data mining processing task faster than computer system, migrating the processing from the computer system to the at least one other computer system”, (see col. 6, lines 57-59).

As per claims 24, 54, 84 and 114, in addition to claim 23, Weiss further discloses, “determining that the processor utilization of the computer system is greater than a predefined amount higher than the processor utilization of the at least one other computer system, (see col. 4, lines 25-31).

As per claims 25, 55, 85 and 115, Weiss discloses, “wherein the remaining cost of completing processing of a data mining processing task is determined based on a time to complete processing of the data mining processing task”, (see col. 3, lines 1-3).

Art Unit: 2172

As per claims 26, 56, 86 and 116, Weiss discloses, “wherein the remaining cost of completing processing of a data mining processing task is determined based on a time to complete processing of the data mining processing task and on additional factors, including actual costs of use of the computer system”, (see col. 3, lines 1-4).

As per claims 27, 57, 87 and 117, in addition to claim 26, Weiss further discloses, “estimating a time to complete the data mining processing task based on the estimate of the amount of processing that must be performed, the estimate of available processor utilization, and a speed of the processor”, (see col. 3, lines 1-15).

As per claims 28, 58, 88 and 118, Weiss further discloses, “estimating additional factors, including actual costs of use of the computer system”, (see col. 3, lines 1-15).

As per claims 29, 59, 89 and 119, Weiss discloses, “wherein the step of determining whether the at least one other computer system can complete processing of the data mining processing task at a lower cost than the computer system comprises the step of soliciting a bid for completing processing of the data mining processing task from the at least one other computer system”, (see col. 3, lines 3-5).

As per claims 30, 60, 90 and 120, in addition to claim 29, Weiss further discloses, “transmitting a request for a bid to the at least one other computer system, the request for the bid

Art Unit: 2172

including information relating to the amount of processing that must be performed to complete the data mining processing task”, (see col. 3, lines 3-5).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13-22, 43-52, 73-82 and 103-112 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,460,037 issued to Weiss et al. (hereinafter “Weiss”) in view U.S. Patent No. 6,240,411 issued to Thearling (hereinafter “Thearling”).

As per claims 13 and 103, Weiss discloses, “In a data mining agent executing in a computer system” (see col. 3, lines 3-4), a method of data mining comprising the steps of:

“determining that the computer system is overloaded due to tasks being executed by the computer system” as functional agents that execute the workflows required for the storage, selection, cleaning and an updating of data, (see col. 3, lines 30-31) and “causing degradation in performance of processing at least one task” as a means for agent identifying and resolving ambiguities, (see col. 3, lines 16-17);

“determining whether the at least one other computer system can complete the data mining processing task being performed on the computer system faster than the computer system”, (see col. 6, lines 44-54); and

“if the at least one other computer system can complete the data mining processing task faster than computer system, migrating the processing from the computer system to the at least one other computer system”, (see col. 6, lines 57-59). Weiss does not explicitly disclose steps of querying at least one other computer system to determine whether the at least one other computer system can complete a data mining processing task being performed on the computer system faster than the computer system. However, Thearling discloses query could be passed to the data mining engine, which would then formulate and evaluate the corresponding query in the data warehouse, (see col. 15, lines 16-34). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combined teachings of Weiss and Thearling with querying at least one other computer system to determine whether the at least one other computer system can complete a data mining processing task being performed on the computer system faster than the computer system. Such modification would allow the teachings of Weiss and Thearling to provide a method of resolving a query for a database storing a plurality of records, (see col. 6, lines 60-61).

As per claims 14, 44, 74 and 104, Weiss discloses, “wherein the migrating step comprises the steps of reserving the at least one other computer system for migration”, (see col. 2, lines 1-5);

“interrupting and checkpointing the data mining processing task on the computer system”, (see col. 15, lines 16-34); and

“enqueueing a request to the at least one other computer system for continued processing of the data mining processing task”, (see col. 6, lines 57-59).

Art Unit: 2172

As per claims 15, 45, 75 and 105, Weiss discloses, “wherein the step of determining that the computer system is overloaded comprises the step of determining that the computer system is overloaded if a utilization of a processor of the computer system is greater than a predefined threshold for a predefined time”, (see col. 3, lines 1-15).

As per claims 16, 46, 76 and 106, the limitation of claims 16, 46, 76 and 106, are rejected in the analysis of claim 13, and these claims are rejected on that basis.

As per claims 17, 47, 77 and 107, Weiss further discloses “estimating a time to complete the data mining processing task based on the estimate of the amount of processing that must be performed, the estimate of available processor utilization, and a speed of the processor”, (see col. 3, lines 1-15).

As per claims 18, 48, 78 and 108, in addition to claim 13, Weiss further discloses, “the information including a speed of the at least one other computer system and an estimate of processor utilization of the at least one other computer system”, (see col. 5, lines 64-67).

As per claims 19, 49, 79 and 109, Weiss discloses, “wherein the step of determining whether the at least one other computer system can complete a data mining processing task being performed on the computer system faster than the computer system”, (see col. 6, lines 57-59).

Art Unit: 2172

As per claims 20, 22, 50, 52, 80, 82, 110 and 112, in addition to claim 17, Weiss discloses “adding an estimate of a time to migrate the data mining processing task to the at least one other computer system and the estimate time to complete the data mining processing task for the at least one other computer system”, (see col. 3, lines 1-15).

As per claims 21, 51, 81 and 111, in addition to claim 1, Weiss further discloses, “receiving from the at least one other computer system an estimate of a time to complete the data mining processing task for the at least one other computer system”, (see col. 3, lines 1-15).

As per claims 43 and 73, in addition to claim 13, Weiss further discloses, “a processor operable to execute computer program instructions”, (see col. 2, lines 40-47);

“a memory operable to store computer program instructions executable by the processor”, (see col. 2, lines 11-20).

Allowable Subject Matter

5. The following is a statement of reasons for the indication of allowable subject matter:

As per claims 1, 3-12, 31, 33-42, 61, 63-72, 91 and 93-102, the prior art of record fails to disclose or suggest the claimed features “wherein the determining step comprises the steps of determining if an algorithm required to process the at least one request for data mining processing is supported by the computer system;

if the algorithm required to process the at least one request for data mining processing is supported, determining whether the computer system is available for additional processing;

Art Unit: 2172

if the computer system is not available for additional processing, determining whether the computer system will become available for additional processing before other computer systems that might process the at least one request;

if the computer system is available for additional processing, or if the computer system will become available for additional processing before other computer systems that might process the at least one request, determining whether the computer system will be able to complete requested processing in an allotted time; and

if the computer system will be able to complete the requested processing in the allotted time, determining that the computer system can process the at least one request for data mining processing ” in conjunction with other elements of the independent claims would not found anticipated or obvious over the prior art made of record. Therefore, claims 1, 3-12, 31, 33-42, 61, 63-72, 91 and 93-102 are hereby allowed

Prior Art

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 5,978,588 issued to Wallace

U.S. Patent No. 6,094,531 issued to Allison et al.

Art Unit: 2172

CONTACT INFORMATION

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B Fleurantin whose telephone number is 703-308-6718.

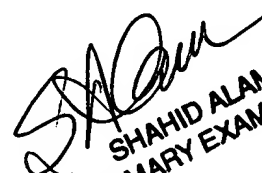
The examiner can normally be reached on 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John B Breene can be reached on 703-305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jean Bolte Fleurantin

May 28, 2004


SHAHID ALAM
PRIMARY EXAMINER